

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

#3/a

In re Patent Application of

D'AGRI, P.

Atty. Ref.: 3410-35

Serial No. unknown

Group:

Filed: February 15, 2002

Examiner:

For: APPARATUS TO AID REHABILITATION OF HEARING DEFICIENCIES AND  
HEARING AID CALIBRATION

\* \* \* \* \*

February 15, 2002

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**PRELIMINARY AMENDMENT**

In order to place the above-identified application in better condition for  
examination, please amend the application as follows:

**IN THE SPECIFICATION**

Please substitute the following paragraphs in the specification for corresponding  
paragraphs previously presented. A copy of the amended specification paragraphs  
showing current revisions is attached.

Page 1, before the first line, insert as a separate paragraph:

This application is the US national phase of international application  
PCT/EP01/01578 filed 13 February 2001, which designated the US.

**IN THE CLAIMS**

Please substitute the following amended claims for corresponding claims previously presented. A copy of the amended claims showing current revisions is attached.

4. An apparatus according to claim 1, characterized in that said memory unit comprises:

- a multimedia database (DBM) comprising a plurality of multimedia filmed recordings depicting real-life situations that can be reproduced by means of the display unit (UV) and the sound modules (MS);
- a patient database (DBP) comprising data representing the patient's personal data and auditory status,
- at least one hearing aid programming module (MPPA) provided by the hearing aid manufacturers, and
- an. expert system (SE) able to process the data representing the patient's auditory status contained in the patient database (DBP) in order to suggest the choice of a hearing aid (PA) and to programme and calibrate a hearing aid (PA).

6. An apparatus according to claim 4, characterized in that said memory unit (UM) is provided with basic software (120) implemented to regulate operation of the apparatus (100) and hearing aid manufacturers' software (121) comprising the hearing aid programming modules (MPPA), said basic software (120) and said hearing aid

manufacturers' software (121) being interfaced with each other and with an operating system (122) of the apparatus (100).

10. A method according to claim 8, characterized in that said first interaction step with the patient further comprises viewing by the patient of a multimedia recording which illustrates the multimedia approach it is intended to follow for rehabilitation of the patient's hearing impairment.

11. A method according to claim 8, characterized in that said data defining the patient's subjective hearing status are obtained on the basis of parameters defining various auditory characteristics such as speech comprehension in silence (I), speech comprehension in noise (IR), speech comprehension in reverberating environments (SR), patient's reaction to quiet noises (D), patient's reaction to loud noises (F), and patient's reaction to the quality of sounds (Q).

12. A method according to claim 8, characterized in that said first interaction between the patient and the hearing aid fitter further comprises a psychological evaluation of the patient to check his response and his cooperation with the bearing aid fitter's examination.

D'AGRI, P.  
Serial No. unknown

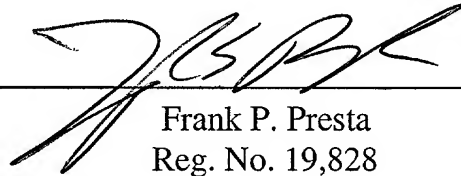
**REMARKS**

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page(s) is captioned "**Version With Markings To Show Changes Made.**"

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_



Frank P. Presta  
Reg. No. 19,828

FPP:ecb  
1100 North Glebe Road, 8th Floor  
Arlington, VA 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE SPECIFICATION**

Page 1, before the first line, insert as a separate paragraph:

This application is the US national phase of international application  
PCT/EP01/01578 filed 13 February 2001, which designated the US.

**IN THE CLAIMS**

4. An apparatus according to ~~any one of the preceding claims~~ 1, characterized  
in that said memory unit comprises:

- a multimedia database (DBM) comprising a plurality of multimedia filmed recordings depicting real-life situations that can be reproduced by means of the display unit (UV) and the sound modules (MS);
- a patient database (DBP) comprising data representing the patient's personal data and auditory status,
- at least one hearing aid programming module (MPPA) provided by the hearing aid manufacturers, and
- an. expert system (SE) able to process the data representing the patient's auditory status contained in the patient database (DBP) in order to suggest the choice of a hearing aid (PA) and to programme and calibrate a hearing aid (PA).

6. An apparatus according to claim ~~4 or 5~~, characterized in that said memory unit (UM) is provided with basic software (120) implemented to regulate operation of the

apparatus (100) and hearing aid manufacturers' software (121) comprising the hearing aid programming modules (MPPA), said basic software (120) and said hearing aid manufacturers' software (121) being interfaced with each other and with an operating system (122) of the apparatus (100).

10. A method according to claim 8 ~~or 9~~, characterized in that said first interaction step with the patient further comprises viewing by the patient of a multimedia recording which illustrates the multimedia approach it is intended to follow for rehabilitation of the patient's hearing impairment.

11. A method according to ~~any one of claims 8 to 10~~, characterized in that said data defining the patient's subjective hearing status are obtained on the basis of parameters defining various auditory characteristics such as speech comprehension in silence (I), speech comprehension in noise (IR), speech comprehension in reverberating environments (SR), patient's reaction to quiet noises (D), patient's reaction to loud noises (F), and patient's reaction to the quality of sounds (Q).

12. A method according to ~~any one of claims 8 to 11~~, characterized in that said first interaction between the patient and the hearing aid fitter further comprises a psychological evaluation of the patient to check his response and his cooperation with the bearing aid fitter's examination.